



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/583,613	06/20/2006	Karl Schmidt	NAESSENS 201-KFM	6055
10/37 7590 08/06/2008 MILDE & HOFFBERG, LLP 10 BANK STREET SUITE 460 WHITE PLAINS, NY 10606				
EXAMINER				
MOK, ALEX W				
ART UNIT		PAPER NUMBER		
2834				
MAIL DATE		DELIVERY MODE		
08/06/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/583,613

**Applicant(s)**

SCHMIDT ET AL.

**Examiner**

ALEX W. MOK

**Art Unit**

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 April 2008.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-23 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 11 April 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/CDC)  
4) ☐ Interview Summary (PTO-413)  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_  
Paper No(s)/Mail Date \_\_\_\_\_

## **DETAILED ACTION**

### ***Amendment***

1. Acknowledgement is made of Response filed April 11, 2008.
2. Acknowledgement is made of the amended drawings submitted in the response filed April 11, 2008.

### ***Specification***

3. The written disclosure is objected to because on page 14 of the claims, there is an amended abstract for the invention. The abstract of the disclosure does not commence on a separate sheet in accordance with 37 CFR 1.52(b)(4). A new abstract of the disclosure is required and must be presented on a separate sheet, apart from any other text.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taiani (US Patent No.: 4896064), and further in view of Fehr et al. (US Patent No.: 4146805).

For claim 1, Taiani teaches a magnetic coupling arrangement wherein at least one magnet arrangement (reference numerals 48, 50, figure 3) is assigned to each of the input shaft and to the output shaft (reference numerals 22, 28), and wherein a containment shell (reference numeral 40, figure 2) comprising at least one inner sleeve and at least one outer sleeve extends between the magnet arrangements (see figure 2). Taiani does not specifically teach the improvement wherein the inner sleeve is formed from a profile element which extends in a manner of a coil.

Fehr et al. however teach a magnetic drive wherein a wall (i.e. profile element) between two magnet arrangements has grooves arranged in a helical manner (see column 2, lines 33-41).

It would have been obvious to have this arrangement for the profile element, and also to axially fasten the profile element using the outer sleeve, since the arrangement of having the profile element in the manner of a coil, as in a helical manner, is already known in the art, as shown by Fehr et al., and a person of ordinary skill in the art would have been able to include this configuration for the purpose of reducing the manufacturing costs and maintenance costs of the coupling arrangement.

For claim 2, it would have been obvious to have a groove on a first side of the profile element and a protrusion at its second side, since this would involve a mere change in the shape of the profile element, which is recognized as being within the level of ordinary skill in the art, and also a person of ordinary skill would have been able to include this for the purpose of better engaging the windings of the profile element.

For claim 3, Taiani discloses a sealing material provided on a side of the profile element (see column 5, lines 32-37).

For claim 4, it would have been obvious to have sealing tape as the sealing material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

For claim 5, Taiani exhibits a cylindrical jacket with a circular bottom (see figure 2).

For claims 6 and 7, Taiani exhibits slots (or notches as claim 7) on the jacket in the longitudinal direction (reference numeral 42).

For claim 8, since Taiani already discloses notches as explained for claim 7, it would have been obvious to make several notches in succession, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

For claims 9 and 10, it would have been obvious to provide both holes for the notches in the jacket and also have perforations for the jacket, since forming holes in a component is well known in the art as exhibited by Taiani (see figure 8), and also this would involve a mere change in the shape of the components, which is recognized as being within the level of ordinary skill in the art.

For claim 11, since Taiani already discloses a sealing as explained for claim 3, it would have been obvious to provide the sealing on either the outer or the inner side, since this would involve a mere change in the location of a component, and it has been

held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

For claim 12, it would have been obvious to include a support ring in the circumferential direction of the jacket, since Taiani discloses a washer (column 6, lines 1-16), i.e. support ring, to separate the laminations on the barrier, i.e. jacket, and a person of ordinary skill would have been able to include this configuration for the purpose of creating sections on the jacket.

For claim 13, it would have been obvious to have the windings compressed so that the profile element can be axially fastened at a flange, since Taiani discloses a flange (column 6, line 37), and that the laminations are tightly clamped together (column 6, lines 57-64), i.e. windings being compressed, which would ensure the fastening of the profile element in the axial direction.

For claim 14, Taiani discloses a spring (reference numeral 104, figure 4C), i.e. spring loaded connection between the inner and outer sleeve.

For claim 15, since Taiani discloses the spring as explained in claim 14 above, it would have been obvious to have the spring element between the inner and outer sleeve for the purpose of axially fastening the profile element.

For claim 16, it would have been obvious to have the bottom of the inner sleeve fastened to the last winding of the profile element, since rearranging parts of an invention involves only routine skill in the art, and a person of ordinary skill would have included this for the purpose of axially fixing the profile element.

For claim 17, Taiani discloses an outer magnet arrangement fastened to the input shaft (see figures 1A, 3).

For claim 18, Taiani discloses an inner magnet arrangement fastened to the output shaft (see figures 1A, 3).

For claim 19, Taiani illustrates magnet rings exhibiting alternating polarity in the radial direction (figures 1A, 3).

For claims 20 and 21, it would have been obvious to have magnet rings with the same polarity arranged in the longitudinal direction and also several groups with differing polarity in the longitudinal direction, since this would involve changing the location of the magnets, i.e. rearranging parts of the invention, the same reason as the location of the sealing of claim 11.

For claims 22 and 23, it would have been obvious to have the gaps between the magnets be assigned to a support ring, and also to have the magnets arranged on the inner and outer sleeves such that the magnets with different polarity are located opposite to one another, since rearranging the magnets and the gaps would involve only routine skill in the art as explained for the location of the magnets of claims 20 and 21 above.

### ***Response to Arguments***

6. Applicant's arguments filed April 11, 2008 have been fully considered but they are not persuasive. A person of ordinary skill in the art would have been able to include the teachings of Fehr et al. since it is in the same field of invention as Taiani, which is

magnetic coupling arrangements, and the "containment shell" of Fehr et al. teaches multiple parts (figures 5, 6) in contrast to applicants argument that the reference only teaches a one-piece shell.

### ***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEX W. MOK whose telephone number is (571)272-9084. The examiner can normally be reached on 7:30-5:00 Eastern Time, 1st Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren E. Schuberg can be reached on (571) 272-2044. The fax phone



Art Unit: 2834

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Alex W. Mok  
Examiner  
Art Unit 2834

/A. W. M./  
Examiner, Art Unit 2834

/Darren Schuberg/  
Supervisory Patent Examiner, Art Unit 2834